Formal Tax Education on Filing Compliance: Mediation Role of General Tax Knowledge

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ABSTRACT: -
Introduction: Taxation is the foundation of the economic structure of most developing countries including Ghana. Despite this, collection of tax revenue with respect to the informal sector of Ghana has been a challenge for tax administrators as many businesses deploy strategies to avoid and evade tax. In light of this, this study assessed the mediating role of general tax knowledge on linkage between formal tax education and filing compliance among informal sector SMEs.

Methodology: The study was carried out within the guidance of quantitative method. This helped the researcher to examine the relationship among the study variables namely formal tax education, general tax knowledge and filing compliance. Further, the design employed in this study was the descriptive research design. Data was obtained from 1,152 informal sector SMEs within the Greater Accra Region of Ghana. The overall sample size for the study was 1,152 respondents recruited using multistage sampling technique namely simple random and snowballing sampling. In addition, data was obtained from respondents using 12 point-based item questionnaires designed through the guidance of literature. Data obtained from respondents were analyzed using Structural Equation Modelling (SEM) specifically Partial least squares (PLS).

Findings: The study found that formal tax education exerts significant positive effect on filing compliance of SMEs within the informal sector of Ghana. Also, formal tax education exerts significant positive effect on general tax knowledge of SMEs within the informal sector of Ghana. Furthermore, general tax knowledge exerts significant positive effect on filing compliance of SMEs within the informal sector of Ghana. Essentially, the study discovered that general tax knowledge mediates significantly the effects of formal tax education on filing compliance.

Conclusion: The study stresses that when informal sector SMEs in Ghana are highly informed about tax systems, processes and procedures, they have a higher likelihood of fulfilling tax obligations and responsibilities thereby enhancing their compliance levels. Therefore, by investing in tax education for informal sector SMEs in Ghana, significant level of improvement can be achieved on the rates of compliance among informal sector SMEs, thereby fostering a more sustainable tax culture within the informal sector of Ghana.

Key Words: Formal tax education, filing compliance, general tax knowledge, tax education, tax compliance and tax knowledge

I. INTRODUCTION

Within the framework of informal economy, Mpofu (2021), indicated that the term informality of SMEs is a challenging term to describe. However, to Schneider (2015), the informal economy is always undergoing changes. SME Informality, according to FeIge (2013), is defined as SME activities that add to GDP but are not recognized and Hart (1970) adopted the term "informal sector" to characterize the business firms that operate outside regulations set by government for such firms. Therefore, informal sector SME operators are enterprises that failed to registered with government authorities and so are not applying government rules in their business activities. The primary distinction between formal and informal firms, according to Haroon and Shariff (2016), is that formal enterprises have systems and norms, and they obey laws and regulations specifically defined by government departments. Informal SMEs, on the other hand, lack norms and regulations and even fail to follow any organization's guidelines (Garriga & Melé, 2012).

With respect to Ghana, most SMEs within the informal sector are unregistered with the Registrar General's Department (RGD), Metropolitan/District Assembly (MDA) and Ghana Revenue Authority (GRA) as established by law (Awiagah et al., 2016; Asunka, 2016). These SMEs within the informal sector have the

capacity and ability in the promotion of economic development, creation of wealth, and overall alleviation of poverty (Mpofu, 2021). They are categorized into three namely (1) Those business with the likelihood of becoming substantial contributors to an economy and solely in the informal sector operations because of their potential for generating growth or wealth, (2) Individuals or families who engage in informal activities in order to survive. The relative simplicity of entry, reliance on local resources, and low capital investment needs are all factors that attract these people and (3) Operators who receive insufficient salaries in the formal sector and decide to engage in informal sector operations as a secondary source of income (ILO, 2018; Kiaga & Leung, 2020).

The contribution of SMEs within the informal sector to taxes is problematic. Tax has the propensity of influencing the fiscal health of a country, infrastructure development, public services, and social equity. An effective tax system has the capacity to generate revenue needed to enhance the overall economic development and stability required in a country (Gonidakis, 2024). In addition, significant number of countries in developing economies such as Ghana depends highly on taxation to generate revenue to meet expenditure requirements of government (Gonidakis, 2024). Despite this, Ndiaye et al. (2018), argued that a substantial number of SMEs in developing countries such as Ghana do not pay taxes due to informality, resulting in loss to governments. This behaviour of informal sector SMEs is attributed to lack of tax education and appropriate tax knowledge (Gonidakis, 2024). Further, there is also a problem understanding the appropriate tax education required by informal sector SMEs in Ghana making it challenging for tax administrators (Mascagni & Santoro, 2018).

Scholarly works on tax compliance have significantly paid attention to tax education, tax compliance and tax knowledge neglecting the impact of specific tax education programs, thus formal tax education on filing compliance. Further, it is also rare to find a studies that looks at the mediating role of general tax knowledge on the linkage between formal tax education and filing compliance. For instance, studies have shown positive effect of tax education on compliance (Saad, 2019; Alm, 2019). In addition, Alm and Leguizamon (2018), established that a tax education program that is comprehensive in form significantly enhances the rates of compliance. In a similar vein, some studies have reported that tax knowledge gained through formal education has the capacity of influencing compliance and tax knowledge (Loo et al., 2010; Kirchler et al., 2018; Kassim & Manosur, 2018; Mohammed & Tangl, 2024).

This knowledge gap among operator's furtherance the issue of non-compliance by most SME owners leading to voluntary tax compliance failure (Mohammed & Tangl, 2024). It is also critical to underscore that the gap between formal tax education, filing compliance and general tax knowledge suggests why current tax educational programs by Ghana Revenue Authority (GRA) have failed to achieve the required success (Gonidakis, 2024).

In light of this revealed gaps in literature, the study looked at is (1) the linkage between formal tax education and filing compliance, (2) linkage between formal tax education and general tax knowledge and (3) the linkage between general tax knowledge and filing compliance, and (4) the mediating role of general tax knowledge on the linkage between formal tax education and filing compliance.

Considering the impact of formal tax education, this research findings will aid in the selection of targeted educational initiatives to boost compliance rates among informal SMEs in Ghana. Furthermore, exploring the mediating role of general tax knowledge emphasizes that mere formal education may not suffice; instead, a foundational understanding of tax processes and benefits is essential. The findings also provide a guide to tax authorities in developing structured, accessible tax education programs, ultimately fostering voluntary filing compliance and strengthening the tax base within Ghana's informal economy contributing to sustainable national revenue growth.

After discussing the introduction in this study, Section 2 provides a short overview of relevant theories and literature from previous research. Section 3 explains the research methods used. In Section 4, the data and results from the study are presented. This is followed by discussions, conclusions, and insights into the theoretical and practical implications of the study, as well as its limitations and suggestions for future research.

II. LITERATURE

2.1 Tax Education

According to Alm et al. (2020), tax education is one of the important concepts within the area of taxation. It is critical components of taxation that has the capacity of enhancing compliance levels of individual taxpayers. It also aids in improving taxpayers understanding in relation to tax laws, tax policies and tax

regulations (Braithwaite & Reinhart, 2020). Braithwaite and Reinhart, (2020), stressed that tax education as a concept involves various methods and approaches to disseminate tax-related information and foster a culture of voluntary compliance. In this vein, tax education is defined as the systematic dissemination of information and training regarding tax laws, regulations, and procedures (Erard & Feinstein, 2019). It aims to inform taxpayers about their rights and responsibilities, thereby promoting voluntary compliance and reducing tax evasion (Erard & Feinstein, 2019). Effective tax education has the capacity to demystify complex tax systems and empower taxpayers to fulfill their obligations accurately and timely (Kasipillai & Jabbar, 2020; James & Edwards, 2021). Studies have argued that the principal objective of tax education is to enhance knowledge and understanding (Saad, 2020), promote the issue of compliance (Richardson & Sawyer, 2018).), enhance tax morale (Torgler, 2019) and reduce errors and evasion (Alm et al., 2020).

2.2 Tax Knowledge

Tax knowledge is one of the important concepts within the area of taxation (Saad, 2020). Saad (2020), indicated that tax knowledge is critical elements that has the capacity to influence tax compliance and tax administration efficiency in organizations. It consists of clear comprehension of tax laws, tax regulations, rights, and responsibilities as they pertain to individuals and businesses. Bobek and Hatfield (2018), highlighted that tax knowledge is highly significance with taxation conceptualization in the sense that its ability is to empower taxpayers to comply voluntarily with tax obligations, thereby reducing the need for enforcement actions by tax authorities. Studies within this perspective has reported that higher levels of tax knowledge are related to enhanced perceptions of fairness and trust in the tax system, which in turn foster higher compliance rates (Bobek & Hatfield, 2018; Kirchler et al., 2020). In addition, it has been reported that comprehensive tax knowledge has the propensity of reducing errors in tax filings and minimize unintentional non-compliance, contributing to more accurate revenue collection (Kirchler et al., 2020).

2.3 Tax Compliance

Tax compliance is one of the important concepts within the area of taxation (Kirchler et al., 2020). Kirchler et al. (2020), reported that tax compliance deals with the degree at which individual taxpayers adhere to tax laws, tax policies and tax regulations in a timely and accurate manner in relation to reporting of income, calculation of tax liabilities, and payment of taxes owed to the authorized organization or agency. Globally, it is regarded as an essential element for the effective functioning of any tax system across ensuring that governments have the necessary resources to provide public goods and services (Kirchler et al., 2020). In addition, tax compliance can be voluntary or enforced by tax authorities (Frey & Torgler, 2018).

2.4 Formal Tax Education

According to Hasseldine and Hite (2020), formal tax education is one of the dimensions of tax education. This is regarded as structured, planned, organized and coordinated programs employed to enhance an individual's comprehension of tax laws, regulations, responsibilities and procedures underscoring compliance. This form of education is required to be delivered through academic courses by tax authorities or educational institutions. The overall goal is to provide taxpayers with the needed knowledge required to meet their tax obligations and make informed decisions (Alm et al., 2020). The study by Hasseldine and Hite (2020), reported that formal tax education has the capacity of enhancing compliance.

2.5 Filing Compliance

In the expression of Luttmer and Singhal (2018), filing compliance is one of the forms of compliance. It deals with the timely and accurate submission of tax returns by taxpayers as enshrined in tax laws or regulations. Filing compliance is important for government as it aids in enhancing revenue collection and propels fairness across the tax system (Kirchler et al., 2020). The study by Luttmer and Singhal (2018), reported that an education that is improved and simplified has the capacity of enhancing filing compliance rates of taxpayers.

2.6 General Tax Knowledge

According to James and Edwards (2019), general tax knowledge is one of the forms of tax knowledge. It covers the basic understanding of tax principles such as laws, regulations, requirements and rights of taxpayers. It plays an important role in empowering individual taxpayers by helping them navigate through the general tax system of a country (James & Edwards, 2019). Scholarly work carried out by Bobek and Hatfield (2018), indicated that general tax knowledge tends to produce high level of compliance thereby enhancing tax revenue and reducing tax evasion.

2.7   Linkage between Formal Tax Education, General Tax Knowledge and Filing Compliance

In the study by Hasseldine and Hite (2020), formal tax education plays a critical role in enhancing overall understanding of taxpayers in relation to tax responsibilities, compliance and required procedures. The authors claimed when tax procedures and processes are well structured and planned by a recognized tax or educational institution, taxpayers are able to acquire greater amount of knowledge regarding tax responsibilities. Hasseldine and Hite (2020), discovered that formal tax education improves awareness level of taxpayers contributing to greater adherence to filing requirements. This according to the authors result in improvement of taxpayers' compliance levels. Despite this, it has been reported that tax education is very critical when addressing issues with tax compliance most especially among SMEs (Luttmer & Singhal, 2018). On the contrary, James and Edwards (2019), claimed that general tax knowledge helps people to comprehend the tax system thereby enhancing their level of compliance with tax laws and regulations. Saad (2020), indicated that general tax knowledge is the foundation upon which taxpayers make informed decisions regarding their tax payment and compliance plans. In light of this, Luttmer and Singhal (2018), reported that filing compliance as a form of compliance is a keen aspect of effective tax administration. The authors argued that an improvement in the level of taxpayers' level of knowledge and education has the capacity of driving filing compliance, error reduction and planned evasion (Luttmer & Singhal, 2018).

2.8   Theoretical Framework
2.8.1   Economic Deterrence Theory (EDT)

According to Nagin (2020), the Economic Deterrence Theory (EDT) is one of the crucial theories that ae principally employed in the fields of criminology and economics. The theory posits that individuals are deterred from engaging in illegal or undesirable behaviour if the costs or risks (e.g., punishment, fines) outweigh the benefits (Paternoster, 2019). In addition, the theory assumes that individuals are rational actors who make decisions based on a cost-benefit analysis (Becker, 2021). In spite of this, van Wingerden and van der Laan (2020), claimed that EDT advocates that criminal behaviour has the propensity to be deterred by increasing the perceived costs of engaging in such behaviour (Simpson & Piquero, 2020). In the words of Nagin (2020), this is attained or realized by ensuring that punishments are certain, appropriately severe, and swiftly administered. If potential offenders believe that the risks (e.g., likelihood of being caught and punished) outweigh the rewards of their illegal actions, they are less likely to commit crimes (Simpson & Piquero, 2020). Further, Becker (2021), argues that the theory of EDT has been applied in diverse fields including criminal justice, tax compliance, and corporate governance to understand and influence behaviour. Further, Paternoster (2019), argues that the EDT advocates that taxpayer behaviour is shaped by factors that influence the costs and benefits of tax evasion, including the tax rate, the likelihood of detection, and the penalties for fraud (Paternoster, 2019). This indicates that when the chances of being caught are high and penalties are harsh, fewer individuals will attempt to evade taxes. Conversely, when the probability of audits and penalties is low, the potential gains from evasion become significant, leading to increased noncompliance (Simpson & Piquero, 2020).

III.   METHODOLOGY

The research was carried out within the guidance of quantitative method. This helped the researcher to examine the relationship among the study variables namely formal tax education, general tax knowledge and filing compliance. It also helped in establishing how general tax knowledge mediates the relationship between formal tax education and filing compliance. Further, the design employed in this study was the descriptive research design. Through the method and the design, the researcher was able to obtain numerical information and provided insightful description of the data. In view of this, data was sourced from registered informal sector SMEs within the Greater Accra Region of Ghana. The overall sample size for the study was 1,152 respondents. Respondents for the study were recruited using multistage sampling technique namely simple random and snowballing sampling. Whilst simple random was employed to recruit respondents from four sectors namely Agricultural, Commerce, Manufacturing and Service on the basis of International Standard Industrial Classification aggregation criterion, the snowballing was used to target SMEs business owners. Furthermore, the data collection process was carried out using 12 point-based item questionnaires designed through the guidance of literature or scholarly works such as Twum, et al. (2020), Mohammed and Tangl (2024), and Othman et al., (2020). The 5-point likert scale ranging from strongly disagrees to strongly agree was employed in the questionnaire design. Data obtained from respondents were analyzed using Structural Equation Modelling (SEM) specifically Partial least squares (PLS). The analysis framework led to the development of two important models namely measurement model and structural model (Hair et al., 2022). In addition, results from descriptive statistics, and paths coefficients from the PLS are also presented.

IV.   RESULTS

4.1   Demographic Outcome
The demographic result from the data analysis is illustrated in table 1.1.

Table 1.1 Demographic Results

| Bio-Data	Details	FREQ.	Percent (%)
Gender	Male	667	58.0
	Female	485	42.0
	Sub-Total	**1152**	**100.0**
Employee Size	1-2 employees	464	40.0
	3-9 employees	516	45.0
	10-49 employees	139	12.0
	Above 49 employees	33	3.0
	Sub-Total	**1152**	**100.0**
Marital Status	Married	317	28.0
	Divorced	47	4.0
	Single	772	67.0
	Widowed	16	1.0
	Sub-Total	**1152**	**100.0**
Educational Level	Primary	45	4.0
	High School	224	19.0
	Diploma	355	31.0
	Graduate	528	46.0
	Sub-Total	**1152**	**100.0**
Religious Affiliation	Christian	883	77.0
	Muslim	252	22.0
	Traditional	17	1.0
	Sub-Total	**1152**	**100.0**

(***Source: Field Data, 2024***)

Generally, the number of respondents used for the study is 1152. Out of this, 58% are males and 42% are females. Additionally, majority of the businesses had maximum of 3 employees indicating 45%, closely followed are those with 3 to 9 employees displaying 45%. This is followed by those with 10 to 49 employees displaying 12% and the least numbers are those with above 49 employees displaying 3%. Furthermore, out of the 1152 respondents, 67% are single, 28% married, 4% divorced and lowest are those widowed representing 1%. In light of this, 46% of 1152 respondents are graduate, 31% diploma, and 4% primary level of education. Moreover, 77% of the total sample is Christians, 22% are Muslims and 1% being the lowest are traditionalist.

4.2   Measurement Model
The result from the PLS analysis is shown below:

Figure 1.1 Measurement Model from PLS
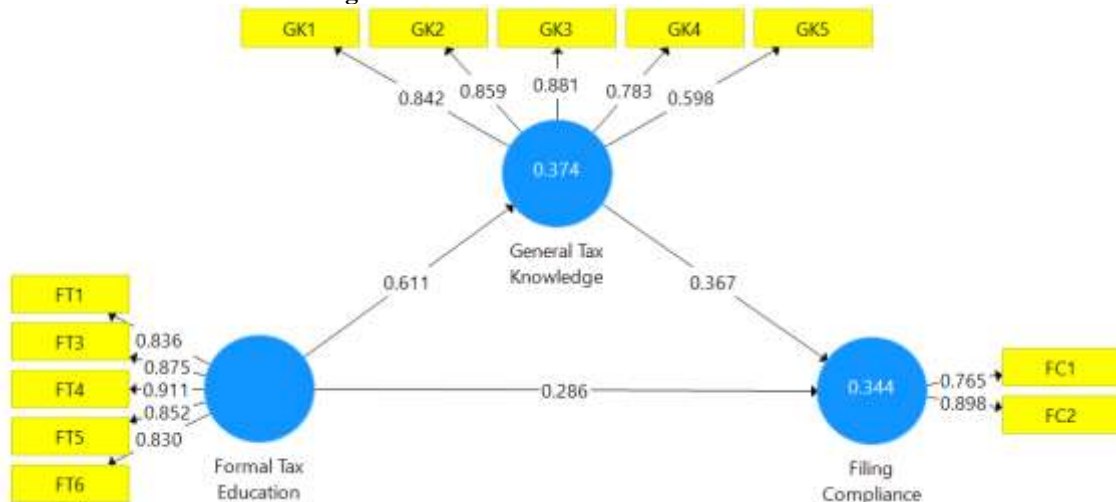
4.3 Factor Loadings Outcome

The factor loadings and multicollinearity statistics are presented in table 1.2 below:

Table 1.2 Factor Loading and Multicollinearity Statistics (i.e. VIF)

Items	Filing Compliance	Formal Tax Education	General Tax knowledge	VIF
FC1	0.765			1.194
FC2	0.898			1.194
FT1		0.836		2.447
FT3		0.875		3.106
FT4		0.911		3.723
FT5		0.852		2.632
FT6		0.830		2.597
GK1			0.842	2.528
GK2			0.859	2.565
GK3			0.881	2.731
GK4			0.783	1.779
GK5			0.598	1.338

Table 1.2 illustrates the factor loadings based on the work of Creswell (2019) and Goran (2013). The authors expound that factor loading shows how closely individual items connect or correlates to a principal variable. In the words of Goran (2013), factor loading values range from -1.0 to +1.0, with higher absolute values suggesting stronger associations or relationships between items and the principal variable or construct. From Table 1.2, the results illustrates that the factor loading score for filing compliance is between 0.765 and 0.898, showing a strong relationship with the filing compliance concept. For formal tax education, the factor loading score ranges from 0.830 to 0.911, also indicating a strong relationship with that formal tax education concept. Similarly, the factor loading score for general tax knowledge falls between 0.598 and 0.881, reflecting a strong connection or relationship to that concept. Overall, these findings suggest that the values indicate strong correlations between the items and the principal variable of filing compliance, formal tax education, and general tax knowledge. Additionally, it has been noted that multicollinearity is not a concern if the Variance Inflation Factor (VIF) scores are less than 10. The results show VIF scores ranging from 1.338 to 3.723, confirming that there is no issue with multicollinearity.

4.4 Reliability Outcome

The outcome from the reliability analysis is presented in table 1.3:

Table 1.3 Reliability Outcome

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Filing Compliance	0.575	0.629	0.820	0.696
Formal Tax Education	0.913	0.916	0.935	0.742
General Tax Knowledge	0.853	0.872	0.897	0.638

Table 1.3 shows the outcome from the reliability analysis. First, it includes Cronbach's alpha, which measures how consistent the variables are. A score of 0.7 or higher is reliable, while a score below 0.7 is not (Hair et al., 2017; Creswell, 2019). The scores for filing compliance (0.575), formal tax education (0.913), and general tax knowledge (0.853) all indicate a high level of internal consistency, showing that these study variables have reliable constructs. The composite reliability (CR) scores are filing compliance (0.820), formal tax education (0.935), and general tax knowledge (0.872), which also demonstrate strong internal consistency and construct reliability. Additionally, the Average Variance Extracted (AVE) evaluates convergent validity, reflecting how well specific items relate to their main constructs (Hair et al., 2022). As stated by Creswell (2019), an AVE score above 0.50 is valid, while a lower score is not. The AVE scores are filing compliance (0.696), formal tax education (0.742), and general tax knowledge (0.638), confirming the convergent validity of these study constructs.

4.5 Structural Model

The Smart-PLS tool provide a structural model in relation to how general tax knowledge mediates the relationship between formal tax education and filing compliance among SMEs within the informal sector of Ghana. The structural mode is displayed in figure 1.2 below:

Figure 1.2 Structural Model – General Tax Knowledge as Mediator
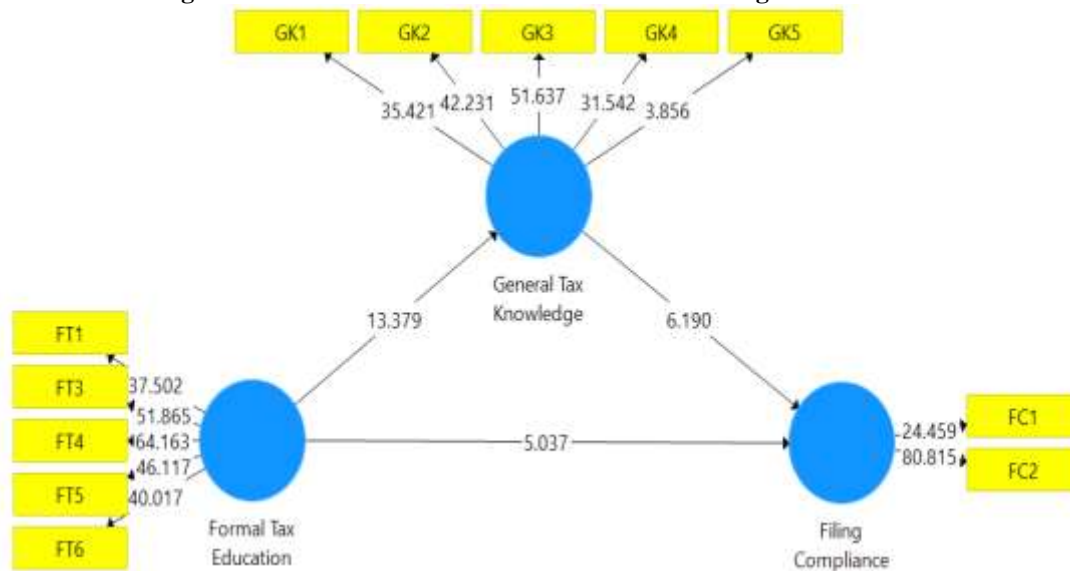
4.6   Direct Effect Results

The study looked at the direct linkage among the study variables namely (1) formal tax education and filing compliance, (2) formal tax education and general tax knowledge and (3) general tax knowledge and filing compliance. The coefficients results from the analysis are shown in Table 1.6.

Table 1.6 Paths Coefficients Results

Paths	Beta Coefficient	T Statistics	P Values
Formal Tax Education -> Filing Compliance	0.286	5.037	0.000
Formal Tax Education -> General Tax Knowledge	0.611	13.379	0.000
General Tax Knowledge -> Filing Compliance	0.367	6.190	0.000

4.7   Formal Tax Education and Filing Compliance

From the PLS analysis the study was examine the link between formal tax education and filing compliance among informal sector SMEs in Ghana. In view of this, the study looked at how formal tax education exerts significant effect on filing compliance within informal sector SMEs of Ghana. From the result table, it is clear that filing compliance is highly influenced or significantly predicted by formal tax education illustrated as (β = 0.286, T = 5.037, p < 0.05). This is a positive prediction and 28.6% of variance explains. It indicates that a unit change in formal tax education has the propensity of causing 28.6% change in filing compliance of informal sector SMEs. This generally illustrates that formal tax education exert significant positive effect on filing compliance of SMEs within the informal sector of Ghana.

4.8   Formal Tax Education and General Tax Knowledge

From the PLS analysis the study examined the link between formal tax education and filing compliance among informal sector SMEs in Ghana. In line with this, the study looked at how formal tax education exerts significant effect on general tax knowledge within informal sector SMEs of Ghana. From the result table, it is clear that general tax knowledge is highly influenced or significantly predicted by formal tax education illustrated as (β = 0.611, T = 13.379, p < 0.05). This is a positive prediction and 61.1% of variance explains. It indicates that a unit change in formal tax education has the propensity of causing 61.1% change in general tax knowledge of informal sector SMEs. This generally illustrates that formal tax education exert significant positive effect on general tax knowledge of SMEs within the informal sector of Ghana.

4.9   General Tax Knowledge and Filing Compliance

From the PLS analysis the study assessed the link between general tax knowledge and filing compliance among informal sector SMEs in Ghana. In view of this, the study looked at how general tax knowledge exerts significant effect on filing compliance within informal sector SMEs of Ghana. From the analysis of the data, the result revealed that filing compliance is highly influenced or significantly predicted by

general tax knowledge represented as ($\beta = 0.367$, T = 6.190, p < 0.05). This is a positive prediction and 36.7% of variance explains. It indicates that a unit change in general tax knowledge has the propensity of causing 61.1% change in filing compliance of informal sector SMEs. This generally illustrates that general tax knowledge exert significant positive effect on filing compliance of SMEs within the informal sector of Ghana.

4.10   Mediating Outcome

The mediation analysis of general tax knowledge was carried out and the result from specific indirect effects is presented in table 1.7.

Table 1.7 Specific Indirect Effects- General Tax Knowledge

Indicators	Beta Coefficient	T Statistics	P Values
Formal Tax Education -> General Tax Knowledge -> Filing Compliance	0.224	5.199	0.000

General tax knowledge is critical indicator within the context of informal sector SME tax operations in Ghana. In view of this, the result from the analysis revealed that general tax knowledge is a significant predictor of the linkage between formal tax education and filing compliance illustrated as ($\beta = 0.224$, T = 5.199, p < 0.05). This indicates that a unit change in general tax knowledge will cause 22.4% change in the effect of formal tax education on filing compliance. This shows that general tax knowledge mediates significantly the effects of formal tax education on filing compliance.

V.   THEORETICAL IMPLICATIONS

Generally, the findings of the study align with the Economic Deterrence Theory (EDT). The theory posits that individuals or taxpayers adhere to tax regulations such as tax filing, when there is perceived cost of non-compliance outweighs the benefits. It is important to note that formal tax education improves the awareness level of informal sector SMEs in Ghana of the potential costs including penalties or legal consequences for non-compliance. The significant positive impact of formal tax education on general tax knowledge and filing compliance also supports the core principles underscoring EDT which shows the decision aspect of taxpayers when it comes to issue of compliance. As informal sector SMEs gain in-depth knowledge on general tax issues through formal structured and planned education, they become highly aware of legal obligations, compliance requirements and its associated risks, thereby propelling the likelihood of the need to file taxes. Notably, it is worth noting that the mediation effect of general tax knowledge underpins the importance of information sharing or dissemination in reinforcing the deterrence mechanism. It is vital to establish that by strengthening the knowledge based of informal sector SMEs in relation to the Ghanaian tax system, the formal tax education obtained will ultimately reduce their non-compliance behaviour confirming EDTs stress on reducing the economic incentives for evasion of taxes.

VI.   DISCUSSION

Remarkably, the findings of the study clearly show the interlink role of formal tax education, general tax knowledge and filing compliance of informal sector SMEs in Ghana. Firstly, the study found that formal tax education exerts a significant positive effect on filing compliance of SMEs within the informal sector of Ghana. This discovery suggests that when informal sector SMEs received education that is well structured, planned and organized, they have a greater likelihood of comprehending the need to fulfill their tax obligations or responsibilities. This stresses on the role of education in enhancing the awareness level of informal sector business owners regarding filing deadlines, consequences of non-compliance, coupled with overall benefits regarding adhering to tax processes, thereby resulting in rise in tax compliance among informal sector businesses in Ghana. This aligns with the study by Hasseldine and Hite (2020), formal tax education plays a critical role in enhancing overall understanding of taxpayers in relation to tax responsibilities, compliance and required procedures. The authors claimed when tax procedures and processes are well structured and planned by a recognized tax or educational institution, taxpayers are able to acquire greater amount of knowledge regarding tax responsibilities. Hasseldine and Hite (2020), discovered that formal tax education improves awareness level of taxpayers contributing to greater adherence to filing requirements. This according to the authors result in improvement of taxpayers' compliance levels. Despite this, it has been reported that tax education is very critical when addressing issues underscoring tax compliance most especially among SMEs (Luttmer & Singhal, 2018). Secondly, the study discovered formal tax education exerts a significant positive effect on general tax knowledge of SMEs within the informal sector of Ghana. By implication, this shows that tax education that is well-structured propels informal sector SMEs comprehension of fundamental concepts underscoring the tax system, process and procedures. It is worth noting that by enhancing general tax knowledge, formal tax education will help overcome the information gaps that often exist within the informal sector, enabling business

owners to make more informed decisions regarding their tax responsibilities and obligations. Further, the positive effect of general tax knowledge on filing compliance of SMEs within the informal sector of Ghana on suggests that informal sector SMEs in Ghana have a strong comprehension of tax systems and regulations, leading to higher likelihood of them adhering to filing requirements. It is important to note that rise in tax knowledge reduces confusion and uncertainty underscoring tax processes and procedures in Ghana. These findings confirm the studies that have established that tax education is to enhance knowledge and understanding (Saad, 2020), promote the issue of compliance (Richardson & Sawyer, 2018).), enhance tax morale (Torgler, 2019) and reduce errors and evasion (Alm et al., 2020). In addition, it has been reported that comprehensive tax knowledge has the propensity of reducing errors in tax filings and minimize unintentional non-compliance, contributing to more accurate revenue collection (Kirchler et al., 2020). Moreover, the study found that general tax knowledge mediates significantly the effects of formal tax education on filing compliance. This implies that a tax education that is well planned enhances compliance level of SMEs indirectly through general tax knowledge. This shows that simply providing tax education is not enough; the resulting increase in tax knowledge is the key factor that drives compliance. This is consistent with study by James and Edwards (2019), who claimed that general tax knowledge helps people to comprehend the tax system thereby enhancing their level of compliance with tax laws and regulations. Saad (2020), indicated that general tax knowledge is the foundation upon which taxpayers make informed decisions regarding their tax payment and compliance plans. In light of this, Luttmer and Singhal (2018), reported that filing compliance as a form of compliance is central aspect of effective tax administration. The authors argued that an improvement in the level of taxpayers' level of knowledge and education has the capacity of driving filing compliance, error reduction and planned evasion (Luttmer & Singhal, 2018).

VII. CONCLUSION

Importantly, it is succinct to expound that formal tax education plays a critical role in improving the filing compliance of informal sector SMEs in Ghana. By significantly enhancing general tax knowledge of informal sector SMEs, formal tax education that is well structured and planned equips these individuals or SME business owners with the required understanding of tax laws, policies, regulations, processes and procedures in Ghana, thereby propelling greater adherence to tax filing requirements and standards in Ghana. The findings also stress that when informal sector SMEs in Ghana are highly informed about tax systems, processes and procedures, they have a higher likelihood of fulfilling tax obligations and responsibilities thereby enhancing their compliance levels. It is also critical to underscore that in view of general tax knowledge mediation role, there is the need for government policies to be geared towards promoting tax compliance by prioritizing comprehensive educational programs that focus not only on the basic obligations underscoring the tax system of Ghana but also on enhancing overall tax knowledge. Therefore, by investing in tax education for informal sector SMEs in Ghana, significant level of improvement can be achieved on the rates of compliance among informal sector SMEs thereby, fostering a more sustainable tax culture within the informal sector of Ghana.

VIII. FUTURE RESEARCH SUGGESTIONS

From the findings of the study, future research can look at the mediation role of general tax knowledge on the impact of informal tax education and filing compliance. In addition, future researchers can look the impact of forms of tax education on forms of tax compliance. Further, future researchers can assess the mediating role of procedural tax knowledge on the linkage between formal tax education and filing compliance.

REFERENCES

[1]. Alm, J., Jackson, B. R., & McKee, M. (2020). Getting the word out: The efficacy of tax education programs. *Journal of Public Economics*, 190, 104207.
[2]. Bobek, D. D., & Hatfield, R. C. (2018). The effect of tax knowledge on perceptions of tax fairness and compliance. *Journal of Business Ethics*, 72(4), 485-500
[3]. Creswell, J. W. (2019). Designing and conducting mixed methods research. Sage publications. (pp. 61-94; 143- 170)
[4]. Devos, T. (2014). The Tax Education Gap:Tax knowledge and attitudes to tax in the UK. London EC4A 3HQ, United Kingdom: Deloitte LLP.
[5]. Dube, G., & Casale, D. (2016). The implementation of informal sector taxation: Evidence from selected African Countries. eJournal Journal of Research, 14(3), 601-623.
[6]. Frecknall-Hughes, J., & Moizer, P. (2019). Exploring the impact of tax education on compliance: The role of procedural knowledge. *Journal of Tax Studies, 23*(1), 58-70.
[7]. Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. International Journal of Multivariate Data Analysis, 1(2), 107-123.

[8]. Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. Research Methods in Applied Linguistics, 1(3),10-027

[9]. Hasseldine, J., & Hite, P. A. (2020). Taxpayer compliance and education programs. Journal of Economic Perspectives, 34(4), 221-234

[10]. Hidayat, H. Yin, M. & Hinz, F. The social norms of tax compliance: Evidence from Australia, Singapore, and the United States, *Journal of Business Ethics, 74*(1), 49-64.

[11]. James, S., & Edwards, A. (2019). Understanding tax compliance behavior: The role of general tax knowledge. Tax Notes International, 95(3), 45-56

[12]. Kassim J., & Manosur, M. (2018). Compliance costs of small and medium enterprises. *Journal of Taxation*, *4*(1), 73-97.

[13]. Kioga, M. & Leung, T. (2020). Responsive regulation and tax practice. *Tax Administration: Improving Compliance in a Globalized World*, 3-20.

[14]. Luttmer, E. F., & Singhal, M. (2018). Tax morale. Journal of Economic Perspectives, 32(4), 137- 158.

[15]. Mascagni, G. (2020). International Centre for Tax and Development, Institute of Development Studies (IDS) . Retrieved from International Centre for Tax and Development, Institute of Development Studies (IDS) : https://www.ictd.ac/blog/taxpayer-education-research/

[16]. Meagher, G. (2018). The impact of taxation education on taxation knowledge among SMEs sectors, International Journal of Financial Research, 6(5), 20-121

[17]. Mohammed*, H. and* Tangl*, A. (*2024*). Taxation* Perspectives: Analyzing the Factors behind Viewing *Taxes* as Punishment—A Comprehensive Study of *Taxes* in Ghana, Journal of Risk and Financial Management, 4(1), 89-161

[18]. Mpofu, F. (2021). The Informal Sector, Payment of Taxes and Tax Compliance in Zimbabwe, 15 Redrobin, Burnside, Bulawayo, Zimbabwe,: University of Science and Technology.

[19]. Murphy, R. (2019). The importance of tax education in fostering civic responsibility. Public Finance and Management, 19(3), 233-248.

[20]. Ndiaye, N., Razak, L. A., Nagayev, R., & Ng, A. (2018). Demystifying small and medium enterprises'(SMEs) performance in emerging and developing economies. *Borsa Istanbul Review*, *18*(4), 269-281.

[21]. Othman, K., Ying, T. & Mensah, R. (2020). Perceptions of Tax Fairness and Tax Compliance Behaviour: Use of SMART-PLUS, 1-90

[22]. Saad, N. (2019). Tax knowledge, tax complexity and tax compliance: Taxpayers' view. Procedia-Social and Behavioral Sciences, 109, 1069-1075.

[23]. Saad, N. (2020). Tax knowledge, tax complexity and tax compliance: Taxpayers' view. International Journal of Law and Management, 62(3), 211-229

[24]. Sanya, R., & Wahba, Y. (2023). Procedural tax knowledge and compliance behavior: Insights from the informal economy. Journal of Informal Sector Studies, 9(2), 84-103.

[25]. Sebele-Mpofu, F. & Mispa, K. (2020). The Informal Sector, the "implicit" Social Contract, the Willingness to Pay Taxes and Tax Compliance in Zimbabwe. 15 Redrobin, Burnside, Bulawayo, Zimbabwe,: University of Science and Technology.

[26]. Slemrod, J. (2020). Tax compliance and enforcement. Journal of Economic Literature, 57(4), 904-954.

[27]. Twum, K. K., Amaniampong, M. K., Assabil, E. N., Adombire, M. A., Edisi, D., & Akuetteh, C. (2020). Tax knowledge and tax compliance of small and medium enterprises in Ghana. South East Asia Journal of Contemporary Business, Economics and Law, 21(5), 2289-1560.

[28]. Udoh, J. E. (2016). Taxing the Informal Economy in Nigeria: Issues, Challenges and Opportunities. International Journal of Business and Social Science, 6, 2219-6021.

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